

Amendments to Claims

Claims 1-15 are pending in the application. The Examiner has rejected claims 1-7, 9, 10 and 12-15, and objected to claims 8 and 11. Please cancel 15 without prejudice, amend claims 1, 2, 5, 6, 7, 8 and 11-14, and add new claims 16-19 as follows:

1. (Currently amended) A surgical drain comprising:
 - an elongated conduit configured to be implanted in and to drain fluid from a patient's body; cavity, the elongated circuit including a first surface and a second surface;
 - a first optical fiber having a first optical fiber distal end, wherein the distal end branches from the conduit and is configured for insertion in tissue proximate to the first surface conduit and configured to deliver energy to the tissue; and
 - a second optical fiber having a second optical fiber distal end configured to receive energy from the tissue.
2. (Currently amended) The surgical drain of claim 1, wherein the first optical fiber distal end has an axis that is substantially parallel to the second ~~fiberoptic~~ optical fiber distal end.
3. (Original) The surgical drain of claim 1, wherein the second optical fiber distal end is configured for insertion in the tissue.
4. (Original) The surgical drain of claim 1, wherein the elongated conduit further comprises at least one housing extending from the conduit, wherein the housing supports the first optical fiber distal end for insertion into the tissue.
5. (Currently amended) The surgical drain of claim 1, ~~comprising a sensing system configured to sense a different physiological property of the tissue~~ wherein the energy received by the second optical fiber distal end has at least one characteristic indicative of at least one physiological property of the tissue.

6. (Currently amended) ~~The system of claim 1~~ The surgical drain of claim 5, wherein the physiological property is selected from the group comprising: oxygenation, perfusion, ~~temperature~~, pH, NADH levels, biochemical composition, or drug concentration, ~~turgidity or pressure~~.

7. (Currently amended) The surgical drain of claim 1, wherein the conduit includes a drain portion configured to rest against a substantial length of tissue within the body cavity and a plurality of drain holes spaced along substantially the entire length of the drain portion.

8. (Original) The surgical drain of claim 1, wherein at least the second optical fiber distal tip is embedded within the conduit ~~behind material that is optically transparent~~.

9. (Original) The surgical drain of claim 1, further comprising a display configured to depict information corresponding to the energy received by the second optical fiber distal end.

10. (Original) The surgical drain of claim 1, further comprising:

a third optical fiber having a third optical fiber distal end configured for insertion in tissue proximate to the second surface and configured to deliver energy to the tissue; and

a fourth optical fiber having a fourth optical fiber distal end configured to receive energy emitted from the third optical fiber distal end.

11. (Currently amended) ~~The system of claim 1~~ The surgical drain of claim 10, further including a processing system in communication with the second and fourth optical fibers configured to compare ~~a difference between~~ the energy received by the second and fourth fibers.

12. (Currently amended) The surgical drain of claim 1, wherein the ~~first-sensing system~~ optical fiber includes a component that is affixed to the conduit.

13. (Currently amended) The surgical drain of claim ~~4~~ 12, wherein the component is embedded in the conduit.

14. (Currently amended) The surgical drain of claim 4 12, wherein the component includes a sensor.

15. (Cancelled).

16. (New) A surgical drain comprising:

an elongated conduit configured to be implanted in and to drain fluid from a patient's body;

an energy source configured for insertion in tissue proximate to the conduit and configured to deliver energy to the tissue; and

an energy receiver that receives energy from the energy source after the energy passes through the tissue in transmission mode.

17. (New) The surgical drain of claim 16, wherein the energy source and/or the energy receiver is an optical fiber.

18. (New) The surgical drain of claim 16, wherein the elongated conduit has a first surface proximate to the tissue, and the energy source is embedded in the first surface of the conduit.

19. (New) The surgical drain of claim 16, wherein the elongated conduit has a first surface proximate to the tissue, and the energy receiver is embedded in the first surface of the conduit.